INFRASTRUCTURE ASSESSMENT AUDIT FOR SUVA – NAUSORI URBAN SCHOOLS

SAINT AGNES PRIMARY SCHOOL (REG 2333)

SUMMARY REPORT

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1) INSPECTION SUMMARY

School Inspection Summary	
School name:	SAINT AGNES PRIMARY SCHOOL
Overall condition state:	POOR
Key recommendations:	
- Overcrowding – 8 new classrooms are required based on FNBC standards - Overcrowding – 6 new classrooms required based on recommended sizing (1.5m^2) - WASH – 5 new toilet cubicles required for girls/maintenance of ablution blocks required- Accessibility –All buildings require accessibility ramps and accessible doorways - Disaster resilience – Windows to include cyclone shutters and roof cladding fastened with Cyclone roofing screws.	
Comments:	
Major defects were noted as follows: • Damaged ceiling with water leakage stain (building B1, B2,) • Cracks on walls (kindergarten building) • Missing ramps (All buildings) • The terrace walkway ceiling missing (not installed), and post beam brackets are rusted. • Inadequate stairway width. (B3) • Dented and dislodged handrails. (Office area) • Rusted roof cladding, gutter, and roofing nails (Especially toilet block)	

Aerial view of the school

General view of school

School type:	**Primary**	✓	**Secondary**		**Year levels**	Y1 to Y8
School address:	MEAD ROAD, NABUA					
School enrolment and staff figures	**No. of Students (Male)**	**No. of Students (Female)**	**No. of Students with Disability**	**No. of Teachers (Male)**	**No. of Teachers (Female)**	
	350	407	3	5	14	
School building arrangement	TOTAL NUMBER OF BUILDINGS: **6** OFFICE & SICK BAY, BUILDING B1 & STAFF ROOM, BUILDING B2, BUILDING B3, TOILET BLOCKS, KINDERGARTEN					
Local government area:	MEAD ROAD NABUA					
Date of inspection:	01st JULY, 2024					
Inspection team:	ANASEINI LEDUA (AL) SHANEEL PRASAD (SP) YASH VINEET MUDALIAR (YM) DURGESH PAL (DP) RAHUL PAL (RP)					
Data collection methods	Visual inspection	✓	Onsite measurement	✓		
	Interviews with school staff	✓	Drone / aerial imagery	✓		
	Survey form	✓	Desktop research			
	Other:					
Assumptions:	NONE					
Limitations:	UNAVAILABILITY OF ALL SCHOOL DOCUMENTS SUCH AS BOUNDARY AREA.					

2) ASSESSMENT OF OVERCROWDING

An assessment for overcrowding was undertaken based on FNBC standards and 2024 enrolment data. The table below summarises the data collected through visual inspection and interrogation of enrolment data and compares this against the FNBC standard student-to-classroom size ratio of 2 m^2 per student.

The assessment results are based on the recommended sizing (1.5m^2), according to 2024 data, an additional 6 classrooms are required across year levels 1 - 5 and 8 for Saint Agnes Primary School.

Year	Stream	Number of students	Current number of classrooms	Number of extra classrooms required based on FNBC on 2024 data
1	101	47	2	1
	102	44		
2	201	41	2	1
	202	42		
3	301	39	2	1
	302	44		
4	401	49	2	1
	402	49		
5	501	46	2	1
	502	44		
6	601	41	3	0
	602	38		
	603	20		
7	701	49	2	0
	702	48		
8	801	39	3	1
	802	34		
	803	39		

3) EXISTING INFRASTRUCTURE CONDITIONS

Given the outlined procedure, the following observations were made:

Block Code	Length (m)	Width (m)	Height (m)	No. of Levels	Type	Room List
ADMINISTRATION OFFICE & SICK BAY BUILDING	8.5	8.4	2.6	1	Timber building single storey, with concrete floor and gable roof.	- administration office - sick bay
B1	41.3	6.3	2.5	1	Timber building single storey, with concrete floor and gable roof	- staff room, office, admin room. -staff toilets -Classroom
B2	41.4	10.35	2.8	1	Timber building single storey, with concrete floor and gable roof	- Classroom - Staff room (common room)
B3	21	6.2	6.0	2	L shaped double storey Concrete structure	**- Ground Floor** – 3 x Classroom/Library **- Top Floor** – 3 x classrooms/Hall
B4	10.5	8.5	3.0	1	Spilt-level building (concrete) with attached covered timber deck.	- Kindergarten
B5	21.5	5.6	3.0	1	Concrete floor with timber stud walls & timber framed roof.	- Toilets Blocks for boys & girls

NOTE: The toilets mentioned refer to a set of cubicles.

Summary Table for Classrooms

This table provides a quick overview of the assessment findings, helping to identify areas that need immediate attention and those in good condition. The following criteria were used:

- Good - No additional work/intervention is required
- Fair - Remedial works required
- Poor - Demolition and replacement with new

Assessment Area	Criteria	Conditions
Structural Integrity	Walls, ceiling, floor, foundation and roofs	Fair
General upkeep	Exterior, interior, furniture and fixtures	Good
Safety compliance	Fire safety, electrical safety,	Fair
Disability	Accessibility	Poor
Ventilation and lighting	Ventilations, Natural Lighting, Artificial Lighting.	Fair

Observations on Structural Elements

- **Walls and Ceiling** – the terrace, deteriorating timber post to be replaced with a similar one. (Front of sickbay) Cracks on concrete observed inside of building B5 (kindergarten) wall.
- **Floors and Foundation** – the floor and foundation for the entire school are found to be stable. There were no visible signs of cracks or uneven surfaces. However, the floor is mostly covered with titles.
- Some for building B2 & B1 timber flooring to be replaced.
- **Roofs** – the school reported that there are no leaks. It was found that roof materials are in good condition. However, some roof cladding and fastenings are partially rusted and require upgrading works.
- The terrace roof & linkway require cyclone upgrading.
- **Windows** – some missing window louver blades were recorded at various buildings
- **Earthquake –** The double-story main concrete building indicates earthquake resistance based on suitable column, beam, and slab size and design.
- **Cyclone**–minor roof upgrading works are required to increase the cyclone-resilient capacity of the structures.

Existing Conditions of Building and Maintenance

- **Exterior –** the building is in fair condition as the wall, beam, column, window seal, doors, eaves, fascia boards, and gutters are intact and coated with paint. The school executes periodical maintenance.
- **Interior –** the building is in fair condition as the walls, beams, columns windows, doors and ceiling are intact and coated with paint. The school executes periodical maintenance. The classrooms were found to be clean with proper waste disposal.
- **Furniture and Fixtures –** the classrooms and offices have adequate furniture and fixtures that do not impede the function of the buildings.

Safety and compliance with standards

- **Fire Safety –** the school does not possess adequate fire safety mechanisms. Present fire Extinguishers need maintenance and commissioning. No fire hydrants and alarm systems were found. The school has an emergency exit plan and a designated assembly area.
- **Electrical Safety –** The school is connected to the EFL Grid. The school has surface wiring with no fault outlets. All electrical systems are measured to be safe.
- **Accessibility –** the school does not meet disability accessibility standards. The school does not have facilities such as ramps, handrails, and accessible restrooms.

Lighting and Ventilation

- **Ventilation –** HVAC system (Heating, Ventilation, and Air Conditioning) is centrally located in the school, in particular, offices and Computer Labs.
- **Natural Lighting –** there are an adequate number of windows installed in classrooms, that are regularly cleaned to allow natural light to enter into classrooms unobstructed.
- **Artificial Lighting –** it was found that all light fixtures are working and provide adequate illumination.

4) WATER SANITATION HYGIENE (WASH) FACILITIES

Condition of Toilets and Washrooms

Saint Agnes Primary School has 15 cubicles for girls & 14 cubicles for boys toilet facilities. The facilities have some minor defects such as:

- The missing mirror to one of handbasin.
- The shower cubicle has missing shower heads.
- Wall needs to be cleaned & new paint finished.

The WASH facilities were well maintained & daily cleaned by the caretaker.

The school has designated specific common toilet blocks building B5 for the whole school. The table below provides data on wash facilities. The Table below presents wash facilities data.

TOILET CUBICLE(S)		No. of Cubicles		Toilet Ratio (1 cubicle: students)		Compliance of Student to Toilet Cubicle Ratio (FNBC).	
Building Index	Used by Years	Female	Male	Female	Male	Female Requirement (1:20) Extra Toilets?	Male Requirement (1:30) Extra Toilets?
B5	Y1-Y8	15	0	407	0	5	0
B5	Y1-Y8	0	14	0	350	0	0

HAND BASINS IN THE TOILET		No. of Hand Basins		Handbasin Ratio 1:		Compliance of Student to Hand Basin Ratio (FNBC).	
Building Index	Used by Years	Female	Male	Female	Male	Female Requirement (1:60) Extra Handbasins?	Male Requirement (1:60) Extra Handbasins?
B5	Y1-Y8	4	0	407	0	0	0
B5	Y1-Y8		4	0	350	0	0

GENERAL OUTDOOR TAPS		No. of General Outdoor Taps	Outdoor Taps Ratio 1:	Compliance of Student to Outdoor Taps Ratio Requirement (1:60) (FNBC) Does it require additional hand basins?
Building Index	Used by Years			
B1	Y1-Y3, Y8	10	1:20	-
B2	Y3-Y5	10	1:23	-
B3	Y5-Y8	8	1:46	-

5) DISASTER RESILIENCE ASSESSMENT

This infrastructure condition assessment aims to evaluate the architectural, structural, and non-structural features of the school to ensure it is resilient to natural disasters and provides a safe learning environment for students. The assessment also identifies areas for improvement and highlights the measures already in place to enhance overall resilience. FNBC 1990 and basic loading, wind, and seismic AS/NZS codes typical details were utilized during and after inspection.

Architectural

- Cyclonic Roof: The school has a cyclonic roof designed to withstand strong winds and seismic activity. However, replacement with new roof cladding and roofing screws is needed.
- Central Location: The school is centrally located, allowing easy access to main streets and relief services.

Structural

- Material Quality: The school buildings are being constructed using reinforced concrete and follow acceptable engineering design principles.
- Structural Integrity: Buildings have demonstrated the capability to withstand and recover from natural disasters like earthquakes, category 3 cyclones, and floods.

Non-Structural

- Disaster Preparedness: Disaster evacuation plans, emergency exit routes, and safety protocols are implemented.
- Fire Safety: Equipped with a fire alarm system and strategically placed fire extinguishers to mitigate fire-related risks.

6) ACCESSIBILITY ASSESSMENT

1. **Compliance with Accessibility Standards:**
   - Educational facilities did not meet accessibility standards, such as the Fiji Disable People Federation Access Audit Tool 1.0. This toolkit covers aspects like ramps, door widths, signage, and accessible routes, also the noncompliance extends beyond physical structures to digital accessibility.

2. **Facilities for Students with Disabilities:**
   - Classrooms did not have adjustable seating arrangements, clear sightlines, and adequate space for mobility aids also including accessible desks and adjustable podiums.
   - Laboratories are not able to accommodate students with various disabilities because of the absence of adjustable lab benches, accessible sinks, and clear pathways.
   - Libraries require accessible shelving, reading stations, and assistive technology (such as screen readers) to enhance library usability.
   - Restrooms (WASH facilities) we're not wheelchair-accessible or have grab bars and sinks at an appropriate height.
   - Common Areas: the cafeterias and outdoor spaces are not designed inclusively. Benches, seating areas, and a few pathways can not accommodate everyone.

3. **Access to Classrooms, WASH Facilities, and Common Areas:**
   - Classrooms do not have wide doorways and ramps to ensure access to classrooms. Additionally, acoustics are not considered for students with hearing impairments.
   - WASH Facilities do not have accessible restrooms with proper signage and a clear pathway to the wash facilities.
   - Common Areas like corridors, courtyards, and gathering spaces are not barrier-free and are without proper lighting and contrasting floor materials to aid navigation.

7) SUMMARY OF FINDINGS

The following summarizes the individual characteristics assessed during the Suva-Nausori school audit for Saint Agnes Primary School.

Categories of Assessment	Existing Condition / State	Required as per Standards	Gaps Observed
Existing Infrastructure Condition	- Structural Integrity – Columns, slabs, beams, rafters, purlins of adequate size. - General upkeep – Minor irregular maintenance. - Safety compliance- handrails where necessary. - Disability- no consideration when constructed. - Ventilation and lighting – damaged and missing lights at some sections of buildings.	- Structural Integrity – Columns, slabs, beams, rafters, purlins sizes to follow FNBC 1990. - General upkeep –routine check-up as per MOE policies with major defects requiring immediate intervention. - Safety compliance- handrails, extra doors, and signage where necessary. - Disability- to comply with the FDPF Disability audit tool - Ventilation and lighting – adequate windows and doors are required as per FNBC 1990.	- Structural Integrity – Columns, slabs, beams, rafters, purlins sizes to follow FNBC 1990. - General upkeep –requires immediate intervention to major defects. - Safety compliance- safety handrails were only present on suspended floors while ground floor rails beside the drain had missing rails (not fully safety compliant). FDPF requires signage which was absent from the school. - Disability- not fully compliant with the FDPF Disability audit tool - Ventilation and lighting – limitations in the count of windows and lighting compared to required FNBC.
Assessment of Overcrowding	- The classrooms are accommodating an average of 757 roll/18 classrooms of 42 students.	- FNBC 1990 requires classroom occupancy to be $2m^2$ per person. Based on that, the required roll per classroom was calculated.	- 10/24 classrooms were accommodating more roll than required. - Given the recommended sizing ($1.5m^2$), about 4 extra classrooms are required to address overcrowding in the school.
Water Sanitation Hygiene (WASH) facilities	Toilets (students: Cubicle) - Boys – 30:1 (14 cubicles) - Girls – 27:1 (15 cubicles) Taps (students: tap) - Students – 27:1 (28 taps) - Menstrual Hygiene was present in every female washroom block	Toilets Ratio (students: Cubicle) - Boys – 30:1 (0 cubicles) - Girls – 20:1 (5 cubicles) Taps Ratio (students: tap) - Students – 60:1 (0 taps) **Please note: The above number of cubicles and taps are respective of 2024 enrolment numbers. Due to the variation of ratio with the student population in FNBC, the initial ratio is referred to ONLY for reporting.** - Menstrual Hygiene to be present in every female washroom block	The boy's toilet ratio was on par with the FNBC 1990 ratio. This may hinder later on with the growing population. - The girl's toilet ratio exceeded the FNBC requirement indicating not enough toilet cubicles are in the school. Given the roll of girls, a total of 5 extra cubicles is required - The tap ratio was below the FNBC requirement indicating extra taps are in the school. - Schools require maintenance of rusting pipes and algae build-up in WASH facilities.
Disaster Resilience Assessment	- columns, beams, and slabs had hairline cracks.	Fiji Building Code 1990. The requirement is that roof cladding be free of rust and	- Rusting of cladding contradicts the cyclone certification

	- The windows only have burglar shutters in some sections.	fastened securely with type 17 cyclonic screws with neoprene washers. Additionally, cyclone brackets are to be fixed on every window frame.	requirement requiring replacement. The absence of cyclone brackets is not acceptable as per the cyclone certification.
Accessibility Assessment	-Handrails partially damaged in corridors. - Classrooms and labs have typical door sizes of 0.8 – 0.9m in width. - Stairway – average 0.9m width.	**The following are requirements from the Fiji Disabled People's Federation Access Audit Tool** - Ramps – required wherever elevation with minimum 1:8 maximum 1:20 - Walkway clearance - - Handrails to be 0.76m to 0.9m. - Doors and Door size – minimum 0.9m. - Clearance required of 1.2m and tread width of minimum 310mm. (National Building Code Table D2.1)	The following facilities are missing. - Ramps and elevators for vertical access - Wide doorways and clear pathways - Proper signage - Wheelchair-accessible restrooms - Grab bars - Proper signage - Inclusive seating areas and pathways - Proper lighting - Contrasting floor materials

8) RECOMMENDATIONS

- To comply with the FNBC, the school will require the following:
  - Classrooms: An additional 4 new classrooms for students in years 1 to 8. This expansion aims to accommodate the growing number of students and provide them with an enhanced learning environment.
- WASH Facilities: An additional 5 cubicles for girls are required, equipped with up-to-date WASH facilities (handbasin), catering particularly to the needs of female students. These new facilities are essential to ensure hygiene and comfort. Additionally, some consideration could also be given to the boys' 1 toilet cubicles as the ratio is on par with the FNBC ratio. The exact number could be discussed upon further analysis.

Weekly routine maintenance work and daily clean-up directives from MOE are also critical components of the plan which include:

- Roof repairs due to rusting of cladding, roofing nails, gutter, and gutter straps for toilet block.
- Plumbing fixes due to algae build-up & toilet vents to be installed.
- New paint application on rails and walls
- Timber post to be replaced due to rot.
- Damage wall cladding to be replaced with a similar kind with a matching colour.

These maintenance activities are designed to address existing wear and tear and to ensure that the school buildings remain in good condition. It is recommended that maintenance be carried out at regular intervals, ideally every 12 months, to prevent deterioration and to maintain a safe and functional environment.

- Accessibility: Prioritize building accessibility features, such as ramps and handrails, to ensure compliance with standards. These features are vital for providing all students, including those with disabilities, with equal access to the school's facilities.

9) COMPLIANCE

Upon inspecting Saint Agnes Primary School, the following conclusions were drawn:

- **MEHA Compliance:** Compliant
- **WASH Facilities:** The school has ample taps. An additional 5 girls' toilet cubicles are required to comply with FNBC 1990.
- **Land Availability:** There is very limited land for additional classroom blocks near the kindergarten block, along the back side of the school ground. Note the school doesn't have a proper standard playing ground.
- **NFA Compliance:** Compliant with NFA basic guidelines but does not have NFA certification.
- **WAF Compliance:** Adequate water supply, but water tanks are being installed for the use of the washroom. A water pump is required for water pressure.
- **FNBC Compliance:** The school is not fully compliant with the occupancy requirements as well as the category 5 cyclone standards based on the windows and roofing requirements.
- **NDMO Compliance**: Targeting NFA and NBC compliance for safety.
- **EFL Compliance:** Assumed to be compliant with EFL standards.
- **DISABILITY Accessibility:** non-compliant

10) APPENDIX

Appendix A – Saint Agnes Primary Site Inspection Report

Appendix B–Land Available for Expansion

Appendix A - Site Inspection Report

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SAINT AGNES PRIMARY SCHOOL (REG 2333)

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LIST OF ABBREVIATIONS

NRW	NRW Macallan (Fiji) Pte Ltd

MOE	Ministry of Education
TT	Tetra Tech International Development Pty Ltd
DFAT	Department of Foreign Affairs and Trade (Australia)
FEG	Free Education Grant
OHS	Occupational Health and Safety
NFA	National Disaster Management Office
WAF	Water Authority of Fiji
NBC	National Building Code
NDMO	National Disaster Management Office
EFL	Energy Fiji Limited

1) SCHOOL BACKGROUND

The school was established in 1962. The was established by the Home of Compassion Sisters with the assistance of Father Hurley of Columban Fathers. It was established for the Catholic poor in the Nabua community.

The school employs 17 teachers paid for by the Ministry of Education and ancillary services staff whose salaries are met by the Saint Agnes School Education Board. The school currently accommodates more than 700 students and tens of thousands more have passed through the school in its 50 years of existence.

Saint Agnes Primary School would continue developing future leaders who would redefine and contribute to building a better Fiji.

The current composition of multicultural backgrounds estimated at 40% Catholic students and 60% of other religious denominations, is a testimony of the feat Saint Agnes Primary School offers to the wider Fijian community. For more information regarding the school, please contact Monica Dass at landline number 3382489 by e-mail: at stagnes@connect.com.fj or Peni, by email at pwerebanivau@yahoo.com or mobile number 9254564.

Table 1: SCHOOL DETAILS

NAME OF SCHOOL	SAINT ANGES PRIMARY SCHOOL
SCHOOL REGISTRATION NUMBER	2333
SCHOOL LOCATION	MEAD ROAD, NABUA
SCHOOL TYPE	PRIMARY SCHOOL
FEEDER SCHOOL	YES
DATE OF INSPECTION	01ST JULY, 2024
MILESTONE	(23/ 86 SCHOOLS)
INSPECTED BY TEAM 1	ANASEINI RAVULALA (AR)
	SHANEEL PRASASD (SP)
	DURGESH PAL (DP)

Table 2: SCHOOL ENROLMENT FIGURES

Enrolment	Number of Students			Students with Disability	Number of Teachers			Comments
	Male	Female	Total		Male	Female	Total	
2024	350	407	757	3	5	14	19	• 18 classrooms. • 757 students. • Student to stream is 757 / 18 classrooms = 757:18 for 2024. • Total taps count = 28 • WASH ratio (Taps) = 757:28 < 60:1 • Total boys' toilet cubicle count = 11 • WASH ratio (Toilets) - Male = 350:11 > 30:1 • Total girls' toilet cubicle count = 13 • WASH ratio (Toilets) - Female = 407:13 > 20:1 Evacuation Centre = Yes
2023	357	404	761	0	5	16	21	
2022	345	309	735	0	16	4	20	
2021	347	408	755	0	4	16	19	
2020	368	396	763	0	4	16	20	
2019	383	422	805	0	6	14	20	

Table 3: 2024 CLASSROOM ENROLMENT DETAILS

GRADE	CLASS NUMBER	TOTAL STUDENT ROLL	NUMBER OF TEACHERS	DIMENSIONS (m)		ACCESS WAY COUNT		OVERCROWDING
				LENGTH	WIDTH	NO. OF DOORS	NO. OF WINDOWS	
1	101	47	1	8.2	6.74	2	12	☒YES ☐NO
	102	45	1	8.2	6.74	2	12	☒YES ☐NO
2	201	41	1	8.2	6.74	2	12	☒YES ☐NO
	202	42	1	8.2	6.74	2	12	☒YES ☐NO
3	301	39	1	8.60	6.68	2	10	☐YES ☒NO
	302	44	1	8.60	6.68	2	10	☒YES ☐NO
4	401	49	1	8.60	6.68	2	10	☒YES ☐NO
	402	49	1	8.60	6.88	2	12	☒YES ☐NO
5	501	46	1	8.20	7.0	1	14	☒YES ☐NO
	502	44	1	8.20	7.0	1	14	☒YES ☐NO
6	601	41	1	8.335	9.74	1	14	☐YES ☒NO
	602	38	1	10.996	7.0	1	16	☐YES ☒NO
	603	20	1	7.08	6.74	2	4	☐YES ☒NO
7	701	49	1	8.335	9.74	1	12	☐YES ☒NO
	702	48	1	8.335	9.74	1	12	☐YES ☒NO
8	801	39	1	8.20	7.0	1	14	☐YES ☒NO
	802	34	1	8.20	7.0	1	14	☐YES ☒NO
	803	39	1	6.90	6.70	1	14	☒YES ☐NO

2) SCHOOL SITE PLAN

AERIAL VIEW

LEGEND			
B#	BUILDINGS	DR#	PONDS/CREEKS/DRAINAGE
PG#	PLAYGROUND	H#	HOSTELS
WC#	TOILETS	ST#	STAFF QUARTERS
T#	TAP / WASH AREA	F#	DINING/FOOD AREA
WS#	WATER STORAGE FACILITY	EFL#	EFL POSTS/ JUNCTION BOX
SEP#	SEPTIC TANK	CP	CAR PARK
LA#	LAND AVAILABILITY	WW#	WALKWAY

3) VISUAL INSPECTION RESULTS

Table 4: EXISTING BUILDING INFORMATION – ADMINISTRATION OFFICE & SICK BAY BUILDING

Building Index	**Administration office & sick bay- timber Structure on a concrete slab with a gable roof.**					
Type:	**Timber building – Single Storey. - timber Structure on a concrete slab with a gable roof.**				**No. of Levels: 1**	
Dimensions	**Length (m): 8.5**		**Width (m): 8.4**		**Height (m): 2.6**	
Existing State of Building						
REF. No.	**Building Component**	**Good[1]**	**Fair[2]**	**Poor[3]**	**Structure Type [4]**	**Comments**
1	Roof Lining		✓		Steel	Corrugated Roofing Iron (CGI)
2	Roof Structure				Timber	The roof structure was concealed. However, could be said to be timber framing.
3	Walls	✓			Timber	Minor damage to timber weatherboard
4	Columns / Beams (where required)		✓		Timber	100 Sq. timber post for the walkway, with a 150x50 timber roof beam. One post is to be replaced due to worn out and damaged. Deteriorating
5	Floor	✓			Concrete	Ok
6	Handrails		✓		Timber Steel	Hand railings require proper fixings. Steel post, handrail with timber bench.
7	Walkway(s)		✓		Concrete slab, 21m width	The space is ok, concrete floor.
8	Services – water	✓				Handbasin in the sick bay room & stand - tap Front of office.
9	Services – Electricity	✓				All electrical fixtures were working upon inspection.
10	Services – communication (internet)	✓				1 intercom present in the classroom for communication purposes. Telecom internet connection.

Comments –

- The terrace 100x100 timber deteriorating post in front of the sick bay is to be replaced with a new one (similar).
- The roof needs cleaning & painting.
- Proper drainage is required at the side & back of the building.
- Mirror damage to timber weatherboard
- Gothic mesh cyclone shutters.
- There is no ramp access to this building & only concrete steps with steel handrails on one side.
- The steps have covered the roof but do not meet National cyclone standards.

[1] Good - No additional works / intervention required
[2] Fair - Remedial works required – min CAT 3 standard
[3] Poor - Demolition and replace with new - min CAT 4 standard
[4] Type of structure - Timber/concrete/steel

Table 5: EXISTING BUILDING INFORMATION – BUILDING B1

Building Index	**Block B: Office & Admin Room / Common Room**		
Type:	**The office & admin room comprises of single-story concrete structure that consists of concrete columns and beams with masonry external walls and timber framed roof structure.** **The common room comprises of single-story timber structure that consists of timber stud walls and a timber framed roof structure.** • **Ground floor: 1 Office and admin room / 1 common room**		**No. of Levels: 1**
Dimensions	**Length (m): 22.3**	**Width (m): 6.3**	**Height (m): 2.5 (from eaves end)**

Existing State of Building

REF. No.	Building Component	Good[5]	Fair[6]	Poor[7]	Structure Type [8]	Comments	
1	Roof Lining		✓		Steel	Corrugated iron roof cladding (painted), rust and algae present on cladding (roof to be pressure washed and repainted).	
2	Roof Structure		✓		Timber	Gable roof made up of timber framed trusses. 100x50 top & bottom chords with 100x50 timber webs along with 75x50 timber purlins placed on the flat side (purlin/rafter strapping missing at some locations).	
3	Walls		✓		Masonry / Timber	Combination of 150mm masonry block walls and 100x50 timber stud walls.	
4	Columns		✓		Concrete / Steel	Concrete columns for the main structure and 60mm diameter CHS posts at 2.4m max centres for the walkway structure.	
5	Beams		✓		Concrete / Timber	Concrete roof beams for the main structure and 50x150mm timber roof beams for the walkway structure.	
6	Floor		✓		Concrete	The concrete slab on grade showing cracking in some areas.	
7	Handrails			✓	Timber	3-200x75 planks inadequately fixed to steel CHS posts.	
8	Walkway(s)		✓		Concrete	1.9m wide concrete pavement dirt and algae present at some places (to be pressure washed clean).	
9	Services – water supply		✓			Water supply from WAF.	
10	Available taps for general use		✓			0 taps	Student–tap ratio = 0:0
11	Services – Electricity		✓			Ok	
12	Services – communication (internet)		✓			Ok	
13	Drainage			✓	PVC	Damaged PVC roof gutters with algae buildup (to be pressure washed and replaced at damaged sections).	

[5] Good - No additional works / intervention required
[6] Fair - Remedial works required – min CAT 3 standard
[7] Poor - Demolition and replace with new - min CAT 4 standard
[8] Type of structure - Timber/concrete/steel

Comments –

- Corrugated iron roof cladding has algae buildup and is rusted in some sections.
- Gutters have algae buildup and are damaged in some sections.
- Timber purlin to timber top chord hold-down straps are missing in some areas.
- Interior ceilings are cracked and water leakage is occurring in some areas.
- The installed glazings do not have cyclone-rated shutters and are not cyclone-rated glazings.
- Timber window frames are damaged in some areas.
- Louvres are missing from the windows.
- The walkway ceiling is damaged and water leakage is occurring in some areas.
- Handrails do not meet building code requirements and are not adequately fixed to CHS posts in some areas.
- Minor cracks in the pavement are present.

Table 6: EXISTING BUILDING INFORMATION – BUILDING B2

Building Index	**Block –B2, 4 bay Classroom & staff room**					
Type:	**Single-story timber structure with timber floor & gable roof.**				**No. of Levels: 1**	
Dimensions	**Length (m):41.4**		**Width (m): 10.35**		**Height (m): 2.8**	
Existing State of Building						
REF. No.	**Building Component**	**Good[9]**	**Fair[10]**	**Poor[11]**	**Structure Type [12]**	**Comments**
1	Roof Lining		✓		Steel	Trimdek roof cladding with few cyclone screws. The roof is to be cleaned & painted. A few cyclone screws missing
2	Roof Structure (based on Visual Inspection only)		✓		Timber	Timber framed rafters, upgrade works Required for rafter holding down & rafter purlin connections
3	Walls	✓			Timber	Exterior wall T &G linings only. 100x50 Stud wall at 600 centres. bottom plate timber deteriorating and needs to be replaced
4	Columns / Beams (where required)		✓		Steel post/timber beams	Post brackets to steel brushed & painted
5	Floor	✓			Timber	Timber flooring mounted to concrete stumps. Timber Flooring of which, timber state was noticed as old timber. Upgrading work is required for the connections.
6	Handrails				steel	Only near the water taps area.
7	Walkway(s)	✓			Concrete, 1.8 width	Minor crack to walkway slab, repairable Both sides of the building.
8	Services – water	✓				12 water taps for this building and toilet For teachers
9	Services – Electricity	✓				All working for the classroom, missing tubers & bulbs.
10	Services – communication (internet)				N/A	

[9] Good - No additional works / intervention required
[10] Fair - Remedial works required – min CAT 3 standard
[11] Poor - Demolition and replace with new - min CAT 4 standard
[12] Type of structure - Timber/concrete/steel

Comments –

- Window glass louvre blades were fixed on site and all were intact.
- The class nature ventilation was good, with ceiling 2 fans present.
- 1 entry and exit to the classroom, consists of a timber door with locks. Some doors to be upgraded.
- All terrace framing & main roof require cyclone upgrading. Connections are not structurally sound.
- downpipe to be re-aligned.
- The damaged Terrace walkway slab is to be repaired.
- All side drains are to be made good & workable for storm-water flows.
- Water tank at the back of the building, tank base to upgrade & water pump to be installed for the tank.
- A fire hose reel is present at the back of the building.
- No fire extinguishers for this structure.
- The entrance steps to the classroom riser are 200mm high and don't comply with building standards.
- This classroom block has two access front/rear with solid doors.
- The classroom seems a bit overcrowded, with 40 students per class on average.
- This classroom doesn't have any disability-accessible ramp.

Table 7: EXISTING BUILDING INFORMATION – BUILDING B3

Building Index	**Block –B3, Classroom/Hall/Library**					
Type:	**Double Storey Concrete Building**				**No. of Levels: 2**	
Dimensions	**Length (m): 21**		**Width (m): 6.2**		**Height (m): 3**	
Existing State of Building						
REF. No.	**Building Component**	**Good[13]**	**Fair[14]**	**Poor[15]**	**Structure Type [16]**	**Comments**
1	Roof Lining	✓			Steel	Corrugated Roofing Iron (CGI)
2	Roof Structure (based on Visual Inspection only)	✓			Timber	Timber frame truss 1.0 c/c with 100x50 purlins at 750 c/c
3	Walls	✓			Concrete block wall	
	Columns/Beams (where required)	✓			Concrete & Steel post	Concrete columns & beams with timber terrace beams & steel posts
4	Floor	✓			Concrete floor	The upper floor hall tiles are damaged & missing.
5	Handrails	✓			Steel	Steel pipes handrail, 1100mm high, welded to terrace post.
6	Walkway(s)	✓			2.0m approx. wide	
7	Services – water	✓				5 water taps in front of the building with stainless steel hand basin
8	Services – Electricity	✓				All good
9	Services – communication (internet)	✓				1 intercom present in the classroom for communication purposes
10	Door	✓			1200 wide door	Double door 2100x1200 wide.

Comments –

- Window glass louvre blades were fixed on site and all were intact.
- This classroom doesn't have any disability-accessible ramp.
- Ventilation was good, ceiling 2 fan present, For the classroom & hall has 4 fans.
- The Downpipe discharge end is not connected.
- All linkway roof & staircase roof, upgrade works are required, but they don't comply with cyclone standards.
- Handrail to welded to steel post, ground floor terrace.
- One water tank at the back of this building is connected but requires a pressure pump.
- 2 x Fire Extinguisher for each section.
- The upper floor end of the building doesn't have any shutters.

[13] Good - No additional works / intervention required
[14] Fair - Remedial works required – min CAT 3 standard
[15] Poor - Demolition and replace with new - min CAT 4 standard
[16] Type of structure - Timber/concrete/steel

Table 8: EXISTING BUILDING INFORMATION – BUILDING B4

Building Index	**Block –B4, Kindergarten**		
Type:	**Spilt level building with attached covered timber decking Structure.**		**No. of Levels: 2**
Dimensions	**Length (m): 10.5 approx.**	**Width (m) 8.5**	**Height (m): 3.0**

Existing State of Building

REF. No.	Building Component	Good[17]	Fair[18]	Poor[19]	Structure Type [20]	Comments
1	Roof Lining	✓			Steel	Trimdek roof cladding with cyclone screws.
2	Roof Structure (based on Visual Inspection only)		✓		Timber	Steel rafter with timber purlins & drop ceiling timber frames.
3	Walls	✓			Concrete walls	Crack between column/wall inside the building
4	Columns / Beams (where required)	✓			Concrete Timber	Concrete columns & beams with timber terrace beams & steel posts
5	Floor	✓			Concrete timber	Attached is the decking floor for the timber structure on pine posts.
6	Handrails	✓			Steel	Fixed to timber poles. (1100mm high)
7	Walkway(s)	✓			Concrete	
8	Services – water	✓				4 water taps for this building at ground level, with two sinks.
9	Services – Electricity	✓				
10	Services – communication (internet)	✓				
11	Toilet Bays	✓			Concrete	2 toilets for male & female & common shower.
12	Ramp				N/A	

Comments –

- Window glass louvre blades were fixed on site and all were intact.
- Ventilation was good, ceiling1 fan present.
- All linkway roof & staircase roof, upgrade works are required, but they don't comply with cyclone standards.
- Handrail to welded to steel post, ground floor terrace.
- Kindergarten has two toilets & one showers.
- It has two entries, with solid doors and a back door exit.
- The column wall connection inside the building shows cracks.
- Roof structure addition works required, don't meet CAT 3 standards.
- Fire Extinguisher at the corner of this building.
- All damage ceiling to the classroom ceiling is to be replaced.
- Fence repair at the back of the school
- Request for a proper play area for Kindy.

[17] Good - No additional works / intervention required
[18] Fair - Remedial works required – min CAT 3 standard
[19] Poor - Demolition and replace with new - min CAT 4 standard
[20] Type of structure - Timber/concrete/steel

Table 9: EXISTING BUILDING INFORMATION – BUILDING B5

Building Index	**B5 – Students female & male Toilets.**						
Type:	**Single-story, concrete structure with timber wall lining above & timber framed roof.**					**No. of Levels:**	
Dimensions	**Length (m): 21.5**		**Width (m):5.6**			**Height (m): 3**	
Existing State of Building							
REF. No.	**Building Component**	**Good[21]**	**Fair[22]**	**Poor[23]**	**Structure Type [24]**	**Count[25]**	**Comments**
1	Roof lining				Corrugated roofing		Cleaning & painting required. Rusted sheeting is to be replaced, with new ones
2	Roof structure	✓			Timber truss		timber frame trusses at 1.0m max. c/c. upgrade is required.
3	Wall	✓			Concrete		
4	Columns/beams (where required)	✓			Concrete		Terrace roof beam with steel post (linkway needs upgrading works)
5	Floor	✓			Concrete		Good conditions, all inside floor non-slip tiles.
6	Handrails	✓			N/A		
7	Walkway	✓	✓✓		Concrete	1.8m	Timber framed roof supported with steel post & wall plate to toilet wall.
8	Services - Water	✓					
9	Service - Electricity	✓					One damaged light switch only
10	Service – communication (internet)				N/A		
11	Toilet Bays – male		✓		Concrete	1 urinal 11 toilets 2 showers	L-shaped sitting bench for changing. 4 hand basins with 2 mirrors installed
12	Toilet Bays – female		✓		Concrete	13 toilets 2 showers	L-shaped sitting bench for changing. 4 hand basins with 2 mirrors installed
13	Toilet Bays – accessible		✓		Concrete		At the back of Classroom Blocks 1 & 2

[21] Good - No additional works / intervention required
[22] Fair - Remedial works required – min CAT 3 standard
[23] Poor - Demolition and replace with new - min CAT 4 standard
[24] Type of structure - Timber/concrete/steel
[25] Count - Used for identifying number of toilet bays and menstrual hygiene facilities

14	Entry to the toilet building		✓		Timber		
15	Menstrual Hygiene facilities						

Comments –

- Window glass louvre blades were fixed on site and all were intact.
- Ventilation was good & lighting ok.
- Toilet roof, upgrade works are required, but they don't comply with cyclone standards.
- Roof cladding rushed, requires replacement & overall roof to be cleaned & painted.
- Some of the toilet block walls require new coat painting.
- Proper swale drainage is required along kindergarten & school grounds.

4) PHOTOGRAPHIC REPORT

BUILDING INDEX – ADMINISTRATION & SICK BAY BUILDING

Client:	TETRA TECH INTERNATIONAL DEVELOPMENT (PTY) LTD	School Name:	SAINT AGNES PRIMARY SCHOOL
Project:	INFRASTRUCTURE PLAN FOR SUVA – NAUSORI URBAN SCHOOL.	Site Location:	MEAD ROAD – NABUA

PHOTOGRAPH No. 1: FRONT

PHOTOGRAPH No. 2: SIDE

PHOTOGRAPH No. 3: REAR

PHOTOGRAPH No. 4: SIDE

PHOTOGRAPH No. 5: TIMBER RAILS & BENCH

PHOTOGRAPH No. 6: OFFICE ENTRY DOOR

BUILDING INDEX – B1

Client:	TETRA TECH INTERNATIONAL DEVELOPMENT (PTY) LTD	School Name:	SAINT AGNES PRIMARY SCHOOL

Project:	INFRASTRUCTURE PLAN FOR SUVA – NAUSORI URBAN SCHOOL.	Site Location:	MEAD ROAD – NABUA

PHOTOGRAPH No. 1: FRONT

PHOTOGRAPH No. 2: SIDE

PHOTOGRAPH No. 3: REAR

PHOTOGRAPH No. 4: SIDE

PHOTOGRAPH No. 5: INTERIOR

PHOTOGRAPH No. 6: FLOOR SPACE

BUILDING INDEX – B2

Client:	TETRA TECH INTERNATIONAL DEVELOPMENT (PTY) LTD	School Name:	SAINT AGNES PRIMARY SCHOOL

Project:	INFRASTRUCTURE PLAN FOR SUVA – NAUSORI URBAN SCHOOL.	Site Location:	MEAD ROAD – NABUA

PHOTOGRAPH No. 1: FRONT

PHOTOGRAPH No. 2: SIDE

PHOTOGRAPH No. 3: REAR

PHOTOGRAPH No. 4: SIDE

PHOTOGRAPH No. 5: INTERIOR

PHOTOGRAPH No. 6: ROOF SPACE

BUILDING INDEX – B3

Client:	TETRA TECH INTERNATIONAL DEVELOPMENT (PTY) LTD	School Name:	SAINT AGNES PRIMARY SCHOOL

Project:	INFRASTRUCTURE PLAN FOR SUVA – NAUSORI URBAN SCHOOL.	Site Location:	MEAD ROAD – NABUA

PHOTOGRAPH No. 1: FRONT

PHOTOGRAPH No. 2: SIDE

PHOTOGRAPH No. 3: REAR

PHOTOGRAPH No. 4: SIDE

PHOTOGRAPH No. 5: INTERIOR

PHOTOGRAPH No. 6: ROOF SPACE

BUILDING INDEX – B4

Client:	TETRA TECH INTERNATIONAL DEVELOPMENT (PTY) LTD	School Name:	SAINT AGNES PRIMARY SCHOOL

Project:	INFRASTRUCTURE PLAN FOR SUVA – NAUSORI URBAN SCHOOL.	Site Location:	MEAD ROAD – NABUA

PHOTOGRAPH No. 1: FRONT

PHOTOGRAPH No. 2: SIDE

PHOTOGRAPH No. 3: REAR

PHOTOGRAPH No. 4: SIDE

PHOTOGRAPH No. 5: INTERIOR

PHOTOGRAPH No. 6: ROOF SPACE

BUILDING INDEX – B5

Client:	TETRA TECH INTERNATIONAL DEVELOPMENT (PTY) LTD	School Name:	SAINT AGNES PRIMARY SCHOOL

Project:	INFRASTRUCTURE PLAN FOR SUVA – NAUSORI URBAN SCHOOL.	Site Location:	MEAD ROAD – NABUA

PHOTOGRAPH No. 1: TOILET ROOF

PHOTOGRAPH No. 2: ROOF INSIDE

PHOTOGRAPH No. 3: INTERIOR

PHOTOGRAPH No. 4: INTERIOR

PHOTOGRAPH No. 5: INTERIOR

PHOTOGRAPH No. 6: INTERIOR

Appendix B – Excel Scoring Sheet

	WEIGHTED CRITERIA		
1	**PART A - CLASSROOM OVERCROWDING (40%)** **Classrooms facilitating students beyond room capacity, determined through number of students per classroom and classroom size**		
	Poor - most to all classrooms are accommodating students above capacity.	32 to 40	**34**
	Criteria Item Score		**34.0**
2	**PART B - WASH FACILITIES (20%)** **WASH- Student ratio based on the Fiji National Building Code (FNBC) Infrastructure Standards (10%)**		
	Poor - WASH-Student ratio for school toilet blocks falls below the ratio in the standard specified by FNBC.	8 to 10	**8**
2.1	**Quality of facilities and current condition such as funtionality and maintenance (10%)**		
	Poor - school toilet facilities are not maintained and the physical infrastructure cause major disturbances to end users.	8 to 10	**8**
	Criteria Item Score		**16.0**
3	**PART C - CONDITION OF INFRASTRUCTURE (20%)** **Building structure and condition of walls, floors, ceilings, overall structural integrity (10%)**		
	Fair - some building structures require more intervention to improve structural integrity and condition.	6 to 7.9	**6**
3.1	**Maintenance and assessment of the upkeep of facilities including painting and repairs (10%)**		
	Good - generally school facilities are maintanined well with minimal disturbances from the physical infrastructure to the end users.	0 to 5.9	**5**
	Criteria Item Score		**11.0**
4	**PART D - DISABILITY ACCESSIBILITY (10%)** **Accessibility features such as the presence of existing ramps, handrails, accessible toilets etc**		
	Poor - School buildings and facilities do not have accessibility features.	8 to 10	**9**
	Criteria Item Score		**9.0**
5	**PART E - DISASTER RESILIENCE (10%)** **Presence and quality of measures for disaster resilience of buildings including structural measures, cyclone shutters and fire safety systems**		
	Poor - most or all school building structures are not resilient to natural disasters and do not have safety systems in place.	8 to 10	**10**
	Criteria Item Score		**10.0**
	TOTAL CRITERIA SCORE		**80.0**

Appendix C – Land Available for Expansion

Australian Government
Department of Foreign Affairs and Trade

TETRA TECH

Disasters DO Happen
Are YOU Prepared?

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SCHOOL NAME:

ST AGNES PRIMARY SCHOOL

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